

In the Claims:

Please amend claims 3-10, 23-24, and 26-30, as set forth below.

Kindly cancel claims 12-22 and 31-32, without prejudice to the inclusion of the subject matter contained therein in any later filed application.

Please add new claims 33-42 as set forth below.

1. (Currently Amended) A stable composition [[isolated nucleic acid reference standard used for validation, standardization, quality control and quality assurance purposes, said nucleic acid reference standard]] comprising an isolated target nucleic acid comprising a known sequence and a microparticulate binding agent, wherein said [[isolated target]] nucleic acid is bound with [[a]] said [[microparticulate]] binding agent, and wherein [[when said isolated target nucleic acid is so bound said isolated target nucleic acid is not substantially detected in a nucleic acid assay, wherein said binding agent is at least one of a binding agent selected from the group consisting of a liposome, a polyamine, a siliceous compound, a zeolite, a polystyrene, chitin, and chitosan]] said binding agent is produced by a method comprising dissolving nylon in concentrated acid to produce a solution and adding said solution dropwise to water thereby producing said binding agent.

2. (Canceled)

3. (Currently Amended) The [[isolated nucleic acid reference standard]] composition of claim 1, wherein said [polyamine] nylon is nylon 6/6.

4. (Currently Amended) The [[isolated nucleic acid reference standard]] composition of claim 1, wherein said [[polystyrene is selected from the group consisting of an amine modified polystyrene and a carboxy polystyrene]] dropwise is about 2 drops per second.

5. (Currently Amended) The [[isolated nucleic acid reference standard]] composition of claim 1, wherein said [[siliceous compound is selected from the group consisting

of silica gel, fumed silica, a glass particle, diatomaceous earth, and an amine-modified silica]]
composition is stable for at least nine days at about four degrees Celsius.

6. (Currently Amended) The [[isolated nucleic acid reference standard]]
composition of claim 1, wherein said [[zeolite is low alumina zeolyte]] composition is stable for
at least twenty-six days at about 4°C.

7. (Currently Amended) The [[isolated nucleic acid reference standard]]
composition of claim 1, where said [[binding agent is mixed with a solution selected from the
group consisting of a solution comprising alcohol, a solution comprising oil, and a solution
comprising a wax base]] composition is stable for at least seventy days at about 4°C.

8. (Currently Amended) The [[isolated nucleic acid reference standard]]
composition of claim 1, wherein said isolated target nucleic acid comprises a known sequence
selected from the group consisting of a ribonucleic acid and a deoxyribonucleic acid.

9. (Currently Amended) The [[isolated nucleic acid reference standard]]
composition of claim 8, wherein said isolated target nucleic acid comprises a known sequence
selected from the group consisting of a linear nucleic acid and a non-linear nucleic acid.

10. (Currently Amended) The [[isolated nucleic acid reference standard]]
composition of claim 1, wherein said [[nucleic acid reference standard is used to assess the
proficiency of a nucleic acid assay]] composition is stable for at least one-hundred three days at
about 4°C.

Claims 11 - 22 (Canceled).

23. (Currently Amended) A kit for assessing the proficiency of a nucleic acid
assay, said kit comprising a [[nucleic acid reference standard]] composition of claim 1, said kit
further comprising an applicator, and an instructional material for the use thereof.

24. (Currently Amended) A kit for producing a nucleic acid reference standard, said kit comprising an isolated target nucleic acid comprising a known sequence and a microparticulate binding agent, wherein said binding agent is produced by a method comprising dissolving nylon in concentrated acid to produce a solution and adding said solution dropwise to water thereby producing said binding agent, said kit further comprising an applicator, and an instructional material for the use thereof [[, wherein said binding agent is at least one of a binding agent selected from the group consisting of a liposome, a polyamine, a siliceous compound, a zeolite, a polystyrene, chitin, and chitosan]].

Claim 25 (Canceled).

26. (Currently Amended) The kit of claim 24, wherein said [[polyamine is]] nylon is nylon 6/6.

27. (Currently Amended) The kit of claim 24, wherein said [[polystyrene is selected from the group consisting of an amine modified polystyrene and a carboxy polystyrene]] acid is hydrochloric acid.

28. (Currently Amended) The kit of claim 24, wherein said [[siliceous compound is selected from the group consisting of silica gel, fumed silica, a glass particle, diatomaceous earth, and an amine-modified silica]] said dropwise is about two drops per second.

29. (Currently Amended) The kit of claim 24, wherein said [[zeolite is low alumina zeolyte]] standard is stable for at least nine days at about 4°C.

30. (Currently Amended) The kit of claim 24, [[said kit further comprising a solution selected from the group consisting of a solution comprising alcohol, a solution comprising oil, and a solution comprising a wax base]] wherein said standard is stable for at least two-hundred forty-two days at about 4°C.

31 – 32 (Canceled).

33. (New) The composition of claim 1, wherein said composition is stable for at least one-hundred fifty-one days at about 4°C.

34. (New) The composition of claim 1, wherein said composition is stable for at least one-hundred fifty-nine days at about 4°C.

35. (New) The composition of claim 1, wherein said composition is stable for at least two-hundred forty-two days at about 4°C.

36. (New) The composition of claim 1, said composition further comprising a buffer solution.

37. (New) The composition of claim 36, said composition further comprising a chelating agent.

38. (New) The composition of claim 1, said composition further comprising an alcohol.

39. (New) The composition of claim 38, wherein said alcohol is at least one alcohol selected from the group consisting of ethanol and isopropyl alcohol.

40. (New) The composition of claim 36, said composition further comprising glycerol.

41. (New) The composition of claim 1, wherein said binding agent has a nucleic acid binding capacity of about 9 micrograms per milligram.

42. (New) The composition of claim 1, wherein said acid is hydrochloric acid.